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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,519	08/29/2001	Xiaoming Gu	280/50357	5214

7590 08/28/2002

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EXAMINER

WILLIAMS, ERIC M

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 08/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/940,519

Applicant(s)

GU, XIAOMING

Examiner

Eric M Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. This action is in response to application serial number with a filing date of 8-29-2001.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 01-09-2000. It is noted, however, that applicant has not filed a certified copy of the patent application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kazuhiko JP 59054825. The following reproduced claims set forth the corresponding structure of Kazuhiko.

1. A wet multiplate clutch (5) of a construction that plural friction plates (16A, 16B) and plural separator plates(1A, 1B) are alternately arranged, wherein between each two friction plates arranged adjacent to each other, plural separator plates are disposed (Figure 5 shows the plural plates 1A, 1B).

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2. A wet multiplate clutch according to claim 1, wherein said plural separator plates disposed between each two friction plates arranged adjacent to each other are disposed separably (the plates of Figure 5 shows the plates separable) from each other.

3. A wet multiplate clutch according to claim 1, wherein between each two mutually-adjacent ones of said plural separator plates disposed between each two friction plates arranged adjacent to each other, a thin member is interposed (Figure 5 has a thin member interposed).

5. A wet multiplate clutch according to claim 1, wherein each two mutually-adjacent ones of said plural separator plates disposed between each two friction plates arranged adjacent to each other have been machined (the separator plates of Fig. 5 have been machined) at mutually-opposing surfaces thereof.

5. Claims 1, 3-4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Avers Patent No. 5,788,035.

Avers discloses a multiplate clutch (Fig. 1) with two separator plates (24a, 24b) between each two friction plates Fig. 3 (22) and the separator plates having a thin member Fig. 3 (24c) that is interposed between the separator plates (24a, 24b) and being "coated" Fig. 3 (24e, 24b) via adhesion (column 4 lines 32-35) to the thin member Fig. 3 (24g).

Furthermore, Avers discloses a clutch with the separator plates (24a, 24b) with a thickness between .01 and .09 inches or .254 mm and 2.286 mm (abstract).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kazuhiko JP 59054825, in view of Mizobuchi et al Reg. Number H974.

Kazuhiko discloses separator plates that are machined, but lacks the teaching of shot blasting. Mizobuchi discloses a bearing that is machined, and more specifically, shot blasted, for holding lubricant in a bearing (column 5 lines 19-22). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the separator plates of Kazuhiko's such that they were machined or shot blasted, in view of Mizobuchi, for the purpose of lubricating the separator plates more effectively.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shimizu et al. Patent No. 5,918,713 discloses a clutch with rubber between the clutch disks for cushioning purposes. Ghidorzi et al. Patent No. 5,176,236 discloses a clutch plate that has been machined with grooves. Yesnik Patent No. 5,048,654 discloses coated clutch separator plates.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M Williams whose telephone number is 703-305-0607. The examiner can normally be reached on Mon. – Fri. from 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 703-308-0830.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

EMW

EMW
August 26, 2002

Charles A Marmor 8/26/02
CHARLES A MARMOR
SUPERVISORY PATENT EXAMINER
ART UNIT 3681